

## REVISIONS TO LANDSCAPE ORDINANCE

### LEGEND:

**EXAMPLE** = DELETION

**EXAMPLE** = ADDITION

Sec. 19-6.2. Landscaping, buffering, and screening.

#### 19-6.2.1 *General.*

(A) *Purpose and intent.* The purpose of landscaping, buffering, and screening requirements is to provide an aesthetically pleasing environment for property owners and residents of the City of Greenville and other members of the public. The requirements are intended to maintain and enhance property values, enhance the appearance of all developments, provide adequate buffers between different land uses, improve the character, appearance, and micro-climate of the city, improve heat and noise abatement, and reduce erosion and stormwater runoff.

(B) *Applicability.* These regulations shall apply on a city-wide basis for the following proposed development plans:

- (1) Subdivision, construction, or reconstruction of all residential and nonresidential developments.
- (2) Construction of a parking structure or a vehicular use area.
- (3) Expansion, paving, or repaving of a nonconforming parking lot pursuant to the provisions of section 19-9.6, nonconforming parking lots.
- (4) Demolition of a structure within the C-4 district resulting in a vacant lot.

(C) *Exemptions.* These regulations shall not apply to the construction **or renovation** of a single-family detached dwelling on an existing lot of record.

(D) *Landscape plan required.* A landscape plan shall be submitted as part of a site plan permit application for all developments listed in (B) above. The landscape plan shall **be in a form approved by the administrator and contain the information as required in the administrative manual** meet the requirements listed in the Administrative Manual.

(E) *Maintenance.* The owner of the property where landscaping is required shall be responsible for the maintenance and protection of all plant and screening material for the duration of the premises.

(1) All landscape material, maintenance, and management shall conform to the minimum standards of the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations.

(2) Landscaped areas shall be maintained in good condition and kept free of dead plants, weeds, or debris. Failure to maintain or replace dead, damaged or diseased plant material or to repair a broken wall or fence within 30 days of notification shall constitute a violation of this section. If a catastrophic event occurs which destroys a large quantity of vegetation, the owner or lessee shall replant within a

reasonable time period determined by the Administrator, normally during the next planting season which is November through March. Replaced plant material must be in compliance with the minimum size, spacing, and quantity standards of this section.

(3) Trees may not be severely trimmed beyond the standards of ANSI A300 Standards for Tree Care Operations. If aggressive trimming occurs, the property will be considered non-conforming and required to replace the trees with trees meeting the minimum size, spacing, and quantity standards of this section.

(4) Buffer and screening material shall be maintained to meet the minimum size, spacing, and quantity standards of Table 19-6.2-1.this section.

(F) *Species variety*. Landscape plan species variety shall be in proportion to the number of trees planted. The following minimum quantities shall be in the form of genus diversity.

Required number of trees	Minimum Species
1-5	1
6-10	2
11-20	3
21+	4

(1) In the case of unusual site limitations, an exception may be requested and a different mix and number of species may be proposed for review and approval. A description of the unusual site limitations and the reasons for the proposed actions must accompany the request upon submittal of the site plan.

#### 19-6.2.2 Landscaping requirements.

##### (A) General.

~~(1) All required plant material and landscape areas shall be properly maintained for the duration of the premises.~~

~~(2)~~(1) All planting areas shall be protected from vehicle damage by the installation of curbing or other methods approved by the administrator. Alternative barrier designs which provide improved infiltration or storage of stormwater are strongly encouraged.

~~(3)~~(2) The plant materials used in and around parking lots and adjacent to street rights-of-way and pedestrian ways shall be designed to assure visibility at intersections and safety of pedestrians.

~~(4)~~(3) All planting areas shall be stabilized with ground covers, mulches, or other approved materials to prevent soil erosion and to allow rainwater infiltration. ~~Gravel, sand, or impervious surfaces are not permitted.~~ Rubber mulch is not acceptable.

~~(5)~~(4) All plant and other materials used to comply with this section shall be placed in such a manner as to ensure maintenance access, to maintain

unobstructed sight distances, to avoid encroachment on neighboring property, and shall be a species suitable for proposed location, including conflicts with all utility easements and rights-of-way.

(5) Any shrub used to comply with a six-foot-tall screening requirement shall be evergreen, and at least four feet in height at the time of planting.

(a) Exception. Shrubs used to screen non-single-family uses proposed for the C-3, S-1, and RDV districts shall be six feet tall at the time of planting.

(6) Plant height refers to the height of plants measured above ground level from the top of the root flare, and does not include the root ball or the plant's container.

(7) The entire planting area must scarified and contain amended on-site soil or a soil mix to a depth of 18 inches.

(B) *Minimum planting size/height requirements.* All landscape planting materials shall conform to the minimum size or height standards in Table 19-6.2-1 at the time of planting as well as meet the standards of ANSI Z60.1 American Standard for Nursery Stock:

(1) For newly planted trees, the caliper measurement of the trunk shall be taken six inches (6") above the top of the root flare up to and including four-inch (4") caliper size. If the caliper at six inches (6") above the top of the root flare exceeds four inches (4"), the caliper should be measured at twelve inches (12") above the top of the root flare.

(2) For existing trees, the diameter measurement of the trunk shall be taken at DBH (Diameter at Breast Height) 4 ½ feet above the average ground level.

Table 19-6.2-1: Minimum Planting Size/Height Requirements/Spacing  
TABLE INSET:

TYPE OF PLANTING MATERIAL	MINIMUM SIZE/HEIGHT/SPACING
Shade trees	2.5" 3" caliper, 12-14' height, 6' clear trunk
Ornamental and understory street trees	8' height 2" caliper, 10' height, 5' clear trunk
Evergreen trees	8' height
Multi-stemmed street trees	2" caliper, 3 canes minimum, 10' height, 5' clear trunk,
Evergreen buffer vegetation	6' height, plant spacing 6' on-center
Evergreen shrubs	18" height
Deciduous shrubs	24" height
Additional screening requirement	48" height, evergreen, plant spacing 4' on-center

(C) *Street trees.* Street trees shall be provided and maintained within, or adjacent to, all existing and proposed public street rights-of-way in accordance with the following requirements:

- (1) Street trees shall include only those trees listed in the approved list of **plant tree** species unless use of an alternative species is approved by the administrator.
- (2) Street trees shall be located in an area no further than ten feet from the existing or proposed street right-of-way line.
- (3) Street trees shall be planted at a spacing of 40 feet **on-center** for **deciduous** shade trees **and evergreen trees**, or 20 feet **on-center** for ornamental and understory trees along the entire length of the street frontage of the proposed development or as approved by the administrator based on the development plans. Ornamental and understory trees **may shall** be used as street trees only when there is an overhead obstacle which would preclude the use of taller-growing **deciduous and evergreen** shade trees. A list of acceptable street trees is available in the administrative manual.
- (4) Preserved existing trees of a **six-inch-caliper 3" DBH** or greater may be used to satisfy the street tree requirement. **Preserved existing trees shall meet all the requirements outlined in Sec. 19-6.3. "Tree Protection", be of an Acceptable Species, Table C, and alive and healthy at the time of final inspection.**
- (5) Trees used to comply with street tree requirements shall not count toward the minimum number of trees required to meet interior parking lot landscaping.

(D) *Interior parking lot landscaping.*

- (1) In addition to all other landscape requirements, all parking lots subject to this section 19-6.2 shall provide and maintain landscaped planting areas within the interior of the parking lot. These standards shall not apply to parking structures **or vehicle display areas**. Each planting area shall consist of at least 180 square feet, or as approved by the administrator.
- (2) In cases where the area required for the construction of the minimum parking spaces as required by section 19-6.1, off-street parking requirements, would cause the removal of a historic or heritage tree, the administrator may modify the landscaping requirements and/or the parking requirements in order to preserve the affected historic or heritage tree.
- (3) Interior planting areas shall be designed within parking areas as:
  - (a) Islands located at the end of parking bays;
  - (b) Islands located between parallel rows of cars, used to visually separate parking areas into pods;
  - (c) Driveway medians, which shall have a minimum width of: **four feet for medians with shrubs**; six feet. **for medians with shrubs and ornamental and understory trees**; and **nine feet for medians with deciduous shade or evergreen trees and foundation plantings or a combination of the items set forth in this paragraph.**
- (4) Each interior planting area shall contain approved **shade trees and shrubs pursuant to the requirements of section 19-6.2.2(B), minimum planting size/height requirements, be planted** at the following rates:
  - (a) One shade tree and eight shrubs for every 2,000 square feet, or portion thereof, of the total parking lot area, **including drives and service areas. Trees used to meet this requirement shall not count toward the required number of street trees.**

- (b) ~~One planting area should be located at approximately 15 space intervals.~~
- (b) Not more than 10 continuous parking spaces shall be allowed in a row of parking without separation by a 180-square foot median containing at least 1 shade tree.
- (5) ~~Planting areas shall be evenly distributed throughout the parking area.~~
- (5) Each parking space must be located within sixty (60) feet of a tree measured from the closest point of the parking space to the tree trunk.
- (6) Shade trees are not to be located any closer than ~~15'~~ 25' apart measured from trunk to trunk.
- (7) Proposed shade trees being used to meet the interior parking lot landscaping requirements shall be located no further than 10' and no closer than 4', from the edge of pavement.
- (8) Existing shade trees may be used to meet the interior parking lot landscaping requirements at the discretion of the administrator if the tree(s) meet the intent of the interior parking lot landscaping requirements and the tree protection requirements.
- (9) Trees used to comply with interior parking lot requirements shall not count toward the number of trees required to meet the street tree requirements.
- (10) No more than 25% of required shrubs may be deciduous.

#### 19-6.2.3 *Buffering and screening requirements.*

(A) *Purpose.* Buffer yards and screening are required in order to reduce the impact of a use of land on adjacent uses that are of a significantly different character, density, or intensity. The width of the buffer yard shall be the same as the setback requirement in the applicable zoning district and all screening materials shall be located within the required yard. A buffer yard may only be occupied by permitted landscaping and screening materials, underground utilities, and stormwater retention areas. Buffer yards and screening shall be required in addition to any other landscaping requirement listed in this section.

(B) *Applicability.* Buffer yards and screening shall be installed and maintained by the developer of:

- (1) A nonresidential development adjoining either:
  - (a) A residential use located in a residential zoning district; or
  - (b) A vacant lot(s) in a residential zoning district.
- (2) A parking structure containing ground level parking with the exception of structures having other permitted uses, fences, walls, or similar structures located between the parking structure and adjacent uses.

(C) *Permitted screening materials.* The following items are permitted for use as screening materials. Alternative screening materials that are not listed may be used if approved by the administrator.

- (1) ~~Planting materials having a minimum mature height of six feet, are listed on~~ Evergreen buffer vegetation that is listed on the ~~approved plant species~~ Acceptable Evergreen Screen/Buffer Tree Species, Table E, list in the

administrative manual, and meet the minimum planting ~~size and~~ height ~~and~~ ~~spacing~~ requirements of Table 19-6.2-1.

(2) An earth berm may be used to achieve a portion of the minimum required six-foot height. Berms shall be covered with grass or mulch and shall be planted with other landscaping materials designed to meet the requirements of subsection 19-6.2.2(A) and (B). The slope of the berm shall not exceed the ratio of 3:1. ~~A berm shall not be used if it will displace existing tree(s) of six inch caliper or more.~~

(3) A solid wood fence measuring at least six feet in height, but not more than eight feet in height. ~~Only treated wood or rot resistant wood, such as cypress or redwood, shall be used. If wood is used, only treated or rot resistant wood is acceptable.~~ Chain link, barbed wire, stock wire, chicken wire, and similar type fences are not permitted.

(4) Masonry walls measuring at least six feet in height, but not more than eight feet in height. Walls shall be finished with brick, stone, textured concrete masonry units, or stucco. Natural and painted concrete block walls are not permitted.

(D) *Screening standard.* With the approval of the administrator, a developer may use any combination of the screening materials referenced in subsection 19-6.2.3. ~~(B)~~ (C) provided the screen provides complete opacity pursuant to the requirements of this section.

#### 19-6.2.4 ~~Perimeter~~ ~~Street~~ buffer yards.

In addition to the requirements of subsection 19-6.2.2, landscaping requirements, and subsection 19-6.2.3, buffering and screening requirements. ~~, parking structures, parking lots, outdoor display areas, and vacant lots created by building demolition in the C-4 district shall be buffered from streets and rights-of-way according to the following requirements: Vacant lots created by building demolition in the C-4 district, parking structures, parking lots, and outdoor display areas shall be buffered from streets and rights-of-way according to the following requirements:~~

(A) The minimum width for any buffer yard shall be the same as the required district setback with an average of five feet measured along the property lines at ten-foot intervals provided, however:

(1) Parking structures located in the C-4 district shall be exempt from the buffer yard requirement when utilizing fences, walls, or similar structures located between the ground level parking and the street or right-of-way.

(B) All areas used for required buffer yards shall be located on the property. In unusual or extraordinary circumstances as determined by the administrator, the public right-of-way may be used to meet the requirements of this section provided the property owner obtains permission from the owner of the right-of-way. Maintenance of the required perimeter buffer yard shall remain the responsibility of the private property owner.

~~(C) The property owner may use evergreen plant materials, fences, walls, or any combination thereof to form a visual buffer along the entire street frontage of the lot, excluding the width of driveways and required sight distances. The buffer shall be maintained at 30 inches in height provided, however:~~

(C) A property shall have a continuous evergreen landscape buffer along the entire street frontage of the lot, excluding driveways. Plant material must meet the minimum planting height listed in Table 19-6.2-1.

~~(1) Vacant lots resulting from the demolition of buildings within the C-4 district shall utilize a combination of fences/walls and plantings consistent with the provisions of subsection 19-6.2.3(C)(1), (3), and (4) and the following:~~

~~(a) Fences/walls shall be a minimum of three and one half feet in height;~~

~~(b) Plantings shall obscure at least one third of the fence/wall at maturity (three growing seasons); and~~

~~(c) Trees shall be planted in the buffer yard pursuant to the provisions of subsection 19-6.2.2(A), (B), and (C).~~

(D) Vacant lots resulting from the demolition of buildings within the C-4 district shall provide plantings consistent with the provisions of the following:

(a) Provide required street trees Sec 19-6.2.2

(b) Provide continuous evergreen buffer Sec 19-6.2.3 C

#### 19-6.2.5 *Additional screening requirements.*

In addition to the landscaping and screening required in this section, evergreen screening shall be required to conceal specific areas of high visual impact or hazardous areas. Plants and a solid fence or wall, at least the height of the item being screened, but not more than eight feet tall, shall be installed around all sides, excluding access areas. Plant material must meet the minimum planting heights listed on table 19-6.2-1 and shall be installed around the following areas:

(A) Loading and service areas.

(B) Refuse collection points/recycling drop-off centers

(C) Ground level mechanical, heating and air-conditioning equipment (except for single-family detached dwellings).

(D) Outdoor electrical or other above-ground utility equipment.

(E) Outdoor storage lots.

(F) Storage tanks.

(G) Communication towers and associated equipment structures.

Access gates to these areas shall be solid and, to the extent practical, not oriented to a public street.

#### 19-6.2.6 *Alternative landscape plan.*

At the discretion of the administrator, Alternate alternate landscaping plans, plant material, planting methods, or landscape design may be used where unreasonable or impractical situations would result from application of landscaping requirements, or where necessary to protect existing vegetation, or where a more creative plan is proposed which substantially complies with the intent of these requirements. Landscaping requirements may be reduced if existing trees or other types of existing vegetation are preserved. Alternative plans, materials, or methods may be justified from natural conditions such as streams, natural rock formations, topography, and other physical conditions related to the site. Lot configuration and the presence and location of utility easements may justify an alternative landscaping plan.



Sec. 19-6.3. Tree protection.

19-6.3.1 *General.*

(A) *Purpose.* Protection of existing tree cover is intended to preserve the visual and aesthetic qualities of Greenville; to encourage site design techniques that preserve the natural environment and enhance the developed environment; to control erosion, slippage, and sediment runoff into streams and waterways; to increase slope stability; and, to protect wildlife habitat and migration corridors. Preservation or provision of trees near structures also serves to conserve energy by reducing heating and cooling costs.

(B) *Applicability.* The requirements of this section 19-6.3 shall apply to all existing and new development, except that the following developments and activities shall be exempt from this section:

- (1) The removal of trees located on individual lots containing single-family detached dwellings;
- (2) The removal of dead or naturally fallen trees, or trees that are found by the administrator to be a threat to the public health, safety, or welfare;
- (3) The selective and limited removal of trees or vegetation necessary to obtain clear visibility at driveways or intersections, or for the purpose of performing authorized field survey work;
- (4) The selective and limited clearing of utility easements to maintain their intended function; and
- (5) The removal of trees or vegetation on land zoned or lawfully used for:
  - (a) Agricultural and forestry activities, including tree farms and approved forestry management practices, except that if a site is substantially cleared of trees pursuant to legitimate forestry activities, no development applications shall be accepted for 36 months from the date the clearing is completed; or
  - (b) Commercial garden centers, greenhouses, or nurseries.

19-6.3.2 *Tree protection and replacement.*

(A) *Tree inventory required.* A tree inventory shall be submitted as part of an application for a final development plan, site plan permit, and grading permit. The inventory shall be in a form approved by the administrator and contain the information as required in the administrative manual.

(B) *Tree protection and replacement.*

- (1) All properties to which this section 19-6.3 applies shall provide and maintain a tree density of 15 tree credit units per acre or pro rata portion of an acre, excluding building footprints and the area of athletic fields and courts.

~~(2) The required tree density may be obtained by preserving existing trees and/or planting new trees.~~

(2) The required tree density may be obtained by preserving existing trees and/or planting new trees which may include required street trees, interior parking lot landscaping, and Heritage and Historic Tree replacements.

- (3) Tree credit units are established for existing and new trees based on each tree's caliper or diameter. The credit units are established in the administrative manual.



(4) The form, size, quality, and proportions of preserved and proposed trees must meet the guidelines outlined in the ANSI Z60.1 American Standard for Nursery Stock.

(5) Single-family residential subdivisions must comply with a required density factor of 15 units per acre, excluding individual single-family lots. This requirement may be met as an average for the total acreage of each phase of the subdivision development, rather than for each individual acre. Trees may be retained or planted along the street right of way, as buffer edge plantings along a development's perimeter, in entranceways, or in common open space. Emphasis shall be placed upon retaining existing trees. It is the responsibility of the current property owner(s) to maintain and manage the required trees per the standards of this ordinance.

(6) If the minimum protection standards are not met, or if trees are observed by the city to be injured or threatened, they may be deemed ineligible for meeting these requirements and additional trees will be required.

*(C) Protection and replacement of heritage and historic trees.*

~~A heritage or historic tree located in any required setback or buffer area shall not be removed unless it is situated in the only location for providing reasonable vehicular access to a site and approved by the administrator. A heritage tree which is removed shall be replaced with a minimum of two four-inch diameter approved trees. A historic tree which is removed shall be replaced with a minimum of four four-inch diameter approved trees.~~

In order to protect significant trees, the City of Greenville has established the Heritage and Historic tree designations. A Heritage tree is any tree greater than 20" in diameter and a Historic tree is any tree greater than 30" in diameter and is located within any required setback or buffer area. A Heritage tree which is removed shall be replaced with a minimum of (2) two four-inch caliper shade trees. A Historic tree which is removed shall be replaced with a minimum of (4) four four-inch caliper shade trees.

(1) New trees used to comply with Heritage and Historic tree replacement requirements shall not count toward the Street Tree requirements.

(2) New trees used to comply with Heritage and Historic tree replacement requirements shall not count toward the Interior Parking Lot Landscaping requirements.

(3) No construction, grading, equipment, or material storage, or any other activity shall be allowed within the Critical Root Zone of a Heritage or Historic trees unless the steps taken to adequately ensure the health of the tree are submitted to the Parks and Recreation Department in writing.

(4) Heritage or Historic trees shall not be cut, removed, pushed over, killed, harmed, trimmed, sprayed, or destroyed without written approval by the Parks and Recreation Department.

(5) Permits for trimming, removing or replacing Heritage or Historic trees can be obtained by contacting the Parks and Recreation Department.

If the administrator determines that there is insufficient space on the property to replace a heritage or historic tree, the replacement tree may be planted on public property approved

by the administrator or a fee **based on market price** in lieu of the replacement cost may be paid to the City of Greenville Tree Foundation.

### 19-6.3.3 *Tree protection during construction.*

#### (A) *Protective fencing.*

(1) *When and where required.* Before grading begins, fencing shall be required, at a minimum, around the **dripline critical root zone** of all trees that are to be preserved. **Fencing shall be located at least ten feet from the trunk of a heritage tree and at least 15 feet from the trunk of an historic tree. Fencing of areas adjacent to existing and proposed road rights-of-way is also required. Additional fencing shall be required around the critical root zone of trees on adjacent properties or located in right-of-way.**

(2) *Type of fencing.* All fencing required by this section shall be a minimum of four feet high and of durable construction; **four-foot orange polyethylene laminar fencing is acceptable. Passive forms of tree protection, such as fencing or continuous rope, may be utilized to delineate tree save areas that are removed from areas of land disturbance. such as wood or metal fencing.**

(3) *Signs.* Signs shall be installed on the protective fence visible on all sides of the fenced-in area (minimum one on each side and/or every 300 linear feet). The size of each sign must be a minimum of **two feet by two feet 1' x 1.5'** and shall contain the following: "TREE PROTECTION ZONE: KEEP OUT."

(4) *Activity within a fenced tree protection zone.* No construction, grading, **parking**, equipment, or material storage, or any other activity shall be allowed within the fenced area.

(5) *Maintenance of fencing.* **Fencing shall be maintained during the period of all construction activity on the site but shall be removed prior to issuance of a certificate of conformity. For existing trees to be counted toward required tree credits, they must be protected during the entire development period, beginning prior to the commencement of site work. Encroachment within the tree protection zone is permitted to allow the landscape contractor access to complete site work.**

~~(B) *Encroachments.* Encroachments within the critical root zones of any tree being preserved to comply with required tree credits, heritage and historic trees, or within designated tree protection zones, shall occur only in rare instances. If such an encroachment is anticipated, the following preventative measures shall be employed:~~

**(B) *Encroachments.* Encroachments within the critical root zones of any tree being preserved to comply with required tree credits, or within designated tree protection zones, shall occur only in rare instances. If such an encroachment is anticipated, a written request must be made to the City Parks and Recreation Administrator for allowance of encroachment. Request must detail preventative measures taken. If approved the following preventative measures shall be employed:**

(1) *Clearing activities.* The removal of trees adjacent to **a tree save protection zone area** can cause inadvertent damage to the protected trees. Wherever possible, it is advisable to cut minimum two-foot trenches along the limits of land disturbance, so as to cut, rather than tear, roots. Trenching **may be is** required for the protection of historic and heritage trees.

(2) *Soil compaction.* Where compaction might occur due to traffic or materials through the tree protection zone, the area must first be mulched with a minimum four-inch layer of processed pine bark or wood chips or a six-inch layer of pine straw. Equipment or materials storage shall not be allowed within tree protection areas.

#### 19-6.4 *Irrigation.*

(A) *Irrigation system* means a device or combination of devices having a hose, pipe, or other conduit installed in the landscape which transmits city water, through which device or combination of devices city water or a mixture of city water and chemicals is drawn and applied to residential or commercial lawns, landscapes or greenspace.

(1) *Rain sensor* means an automatic device that will override the irrigation cycle of an irrigation system, thus turning it off, when a predetermined amount of rain has fallen. To meet the requirements of this section, a rain sensor shall be adjusted to shut off irrigation systems when up to one-fourth inch of rain has fallen.

(a) *New installation.* From and after January 1, 2011 rain sensors shall be required on all automatic irrigation systems that will receive city water.

(b) *Required maintenance.* All rain sensors shall be adjusted and set so that they automatically shut off the irrigation system after not more than one-fourth inch of rainfall has occurred. All rain sensors shall be installed according to manufacturer's instructions in a location that will provide full exposure to rainfall such that accuracy of operation is assured and shall be maintained in good working condition. No person shall, with the intent of circumventing the purpose of this section, adjust either the rain sensor or irrigation system so that the rain sensor is not able to override and turn off the irrigation system after one-fourth inch of rain has fallen.

#### DEFINITIONS:

*Shade tree.* Any evergreen or deciduous tree whose mature height can be expected to exceed 35 feet and whose crown spread can be expected to exceed 30 feet.

*Ornamental and understory street trees.* Any evergreen or deciduous tree whose mature height can be expected to exceed 15 feet and whose crown spread can be expected to exceed 10 feet.

*Multi-stem tree.* Where three or more main stems arise from the ground from a single root crown or at a point just above the root crown and a tree whose mature height can be expected to exceed 15 feet and whose crown spread can be expected to exceed 10 feet.

*Critical root zone.* The minimum area beneath a tree that must be left undisturbed in order to preserve a sufficient root mass to give a tree a reasonable chance of survival. The critical root zone is typically represented by a concentric circle centering on the tree trunk

with a radius equal in feet to one (1) times the number of inches of the trunk diameter:  
(CRZ in ft = 1 x Diameter inches)

*Diameter at Breast Height (DBH).* Tree DBH is the outside bark diameter at breast height. Breast height is defined as 4.5 feet above the forest floor on the uphill side of the tree.

*Tree Protection Zone (TPZ).* A designated area around a tree or group of trees to be saved usually set off from construction activity by the use of a fence or other protective barrier thereby keeping the critical root zone of the tree protected and free from unwanted harmful activities. The area of the TPZ should be equal to or greater than the critical root zone.

## **HERITAGE TREE**

### **Existing Definition:**

~~Any tree located on either public or private property and either within a tree protective zone or not having a trunk of 20 inches or more in diameter measured 6 inches above the normal ground level or, if of an ornamental variety, any tree having a trunk of 10 inches or more in diameter measured 4 feet six inches above the normal grade.~~

### **Proposed Definition:**

Any tree having a DBH of 20 inches or more that is located on either public or private property and within a required setback. Any understory or ornamental tree having a DBH of 10 inches or more in diameter that is located on either public or private property and within a required setback.

## **HISTORIC TREE**

### **Existing Definition:**

~~Any tree with a trunk of 30 inches or more measured at four feet six inches above the normal ground level, wherever located.~~

### **Proposed Definition:**

Any tree having a DBH of 30 inches or more that is located on either public or private property and within a required setback. Any understory or ornamental tree having a DBH of 20 inches or more in diameter that is located on either public or private property and within a required setback.